



# New Century Composite Squadron

**NCR-KS-123**

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NEW CENTURY AIR CENTER, KS 66031**



## FROM THE EDITOR

The Newsletter will be in a different format for the first three editions in 2009 to test which one is best for reading and holding the most content.

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## FROM THE COMMANDER

*Lt. Col. Dominick Italiano*

### AE Newsletter

The publication of the Squadron's AE Newsletter in October is a great start from our new Aerospace Education Officers. The team will be meeting with me and other staff officers to plan out the logistics to implement next year's activities ensuring aerospace education is fun learning experience for us all. Please support the activities by attending not only the aerospace education meeting, but our other important training and learning events.

### Charles E. "Chuck" Yeager Award

One of the Kansas Wing's 2009 Plan of Action is for senior members to complete the Yeager Award. The award is one of two measurements senior members can earn to show we are meeting the aerospace mission mandated by Congress on CAP's charter. The squadron is graded annually on the number of awards earned.

One squadron senior member has earned the Yeager Award in 2009. You do not have to wait until 2010 to earn it. ❖

## **CELEBRATE AVIATION HISTORY MONTH AT THE NATIONAL MUSEUM OF THE U.S. AIR FORCE**

### ***November is Aviation History Month By 2nd Lt Maynard***

Celebrate Aviation History Month in November by visiting the world's largest and oldest military aviation museum in Dayton, Ohio.

Join the more than one million people who visit the National Museum of the United States Air Force each year to see more than 400 aerospace vehicles and thousands of historical items displayed throughout 17 acres of indoor exhibit space.

From the 1909 Wright Military Flyer to the F-22A prototype, the museum's vast aircraft collection spans the range of military aviation history from the early years through today's age of stealth aircraft. Visitors can see a variety of aircraft, including the B-29 *Bockscar*, which dropped the second atomic bomb and is credited with ending World War II; President Kennedy's Air Force One; the F-117 stealth fighter; a variety of unmanned aerial vehicles; and the world's only permanent public display of the B-2 stealth bomber.

Many of the aircraft exhibits also include dioramas, which help bring history to life by creating scenes that draw visitors into the moment depicted, illuminating the story of the people behind history's aircraft and campaigns. Items incorporated in these displays include military uniforms dating back to 1916 and personal mementos, such as diaries and medals. ❖

## **KANSAS AVIATION HISTORY – AMELIA EARHART**

### ***Civil Air Patrol's Recognition of Earhart By 2nd Lt Maynard***

Kansans have been involved in aviation and aeronautics from its beginnings with Kansas' most notable pioneer being **Amelia Earhart**.

**Amelia Earhart** is the world's most famous female aviator who disappeared in 1937, as she attempted to become the first woman to fly around the world. She and her navigator, Fred Noonan, flying in her Lockheed Electra were last heard from about 100 miles from the tiny Pacific atoll, Howland island on July 2, 1937.

She achieved a number of aviation records including:

- the first woman to fly across the Atlantic, in 1928
- the first person to solo from Hawaii to California, in 1935



The Civil Air Patrol recognized Earhart's significant contributions by creating a second milestone in her name within the Cadet Program. The milestone is the completion of the first eleven achievements of the Cadet Program. In addition, the cadet must pass a comprehensive 100-question examination covering aerospace topics, leadership theory, and staff duties.

In accordance with its importance within the Cadet Program, the Amelia Earhart Award is normally presented by a CAP Wing Commander (or higher) or a state or federal government elected official. Once a cadet earns the Earhart Award, they are promoted to the grade of Cadet Captain. A cadet who has received this award, and who later enters CAP's Senior Member program, is eligible for immediate promotion to CAP First Lieutenant at age 21.

Cadets who receive the Amelia Earhart Award also enjoy all the benefits gained from earning the General Billy Mitchell Award. Additionally, these Earhart Award cadets are now eligible to apply for participation in the International Air Cadet Exchange.



*Amelia Earhart Ribbon*

In March 2009, **Cadet Captain Aubry J. Eaton** joined the Kansas Wing's **Hall of Honor** by being the eighth New Century Composite Squadron Amelia Earhart Award recipient. He joins seven other past squadron recipients, and is Kansas' 77th recipient. He joins 78 total Kansas Wing recipients since the award was created.

The other squadron recipients have been Cadet Captains Nathan F. Scalia (11/2005), Daniel P. Metcalf (5/2005), Peter G. Pfau (3/2005), Jordan M. Winemiller (10/2003), Aaron M. Lindemann (6/2002), Nicholas M. Carvan (6/2002) and Ryan H. Giles (11/2001) who is the Squadron's first award recipient. ❖

## CURRENT EVENTS: SPACE SHUTTLE MISSIONS

### *The Final Countdown*

*By 2<sup>nd</sup> Lt Maynard*

NASA has published the final Space Transport System (STS) space shuttle flight on July 29, 2010. The shuttle Endeavor (STS-134) will launch concluding over 38 years of Space Transport System development and operations. The most notable missions included:

- repairing the Hubble Space Telescope
- crew rotations for Mir and the International Space Station
- low earth orbit experiments
- carrying satellites for high altitude launches
- the loss of two shuttles



Even though the STS proved to be an overwhelming success, there were low points in the program when the 1986 Challenger (STS-51-L) was lost 73 seconds after lift-off on January 28, 1986 and the loss of Columbia (STS-107) approximately 16 minutes before its landing on February 1, 2003.

NASA will be replacing the STS program with Orion capsules launched by the Ares 1 launch rocket. The Orion capsules will look like Apollo capsules, but will be much larger in order to carry a larger payload to the International Space Station, improved flight control technology, and to return to the Moon and possibly Mars.

2010 will bring many changes in NASA. NASA will be winding down the Space Shuttle era replacing it with new "old" technology with better and improved Apollo type capsules. We were able to witness the cradle to retirement of space technology created by the nameless engineers, scientists, mission controllers and of the flight crews who created new aerospace history.

The Civil Air Patrol witnessed one of its own former cadets, C/Col, now senior member, Col. Eric Boe, who served as a pilot on the Endeavor space shuttle mission (STS-126) for 15 days in November 2008. Col. Boe has been selected for his second shuttle pilot mission on STS-133 as the next to last 2010 mission.

We will be witnesses to NASA's next phase of space exploration with the construction of space systems to achieve the United States' goal of revisiting the moon and possibly establishing a lunar based launch facility for the possible staging of equipment and astronauts to launch missions to Mars. ❖

## Key November Space Exploration Milestones

**November 03, 1957** -- Sputnik II launches, with ill-fated Laika the dog on board.

**November 09, 1967** -- First test flight of the Saturn V rocket which would carry dozens of capsules into space.

**November 20, 1998** -- First piece of the International Space Station is launched.

**November 02, 2000** -- The crew of Expedition One, astronaut Bill Shepherd and cosmonauts Yuri Gidzenko and Sergei Krikalev dock at the International Space Station becoming the first to live on the station.

**November 14, 2008** -- Civil Air Patrol Col. Eric Boe carried his CAP General Carl A. Spaatz coin on the Space Shuttle Endeavor for a 15 day mission.

## EVENTS CALENDAR: AEROSPACE EDUCATION

### SQUADRON AEROSPACE EDUCATION FOR SENIORS (EVERY THIRD TUESDAY OF THE MONTH)

PLACE: NEW CENTURY

TIME: 8 PM TO 9 PM

AEROSPACE: *THE JOURNEY OF FLIGHT*

### SQUADRON AEROSPACE EDUCATION FOR CADETS (EVERY FIRST TUESDAY OF THE MONTH)

PLACE: NATIONAL GUARD ARMORY - OLATHE

TIME: 7 PM TO 9 PM

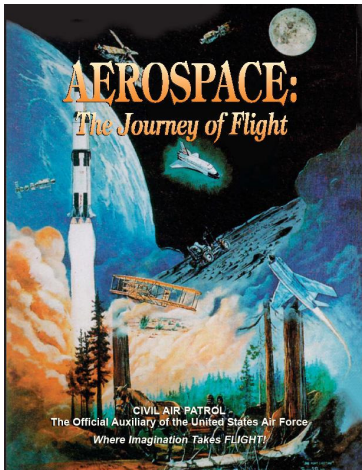
### NATIONAL EVENTS

NATIONAL AVIATION MONTH

## AEPSM - AEROSPACE: *THE JOURNEY OF FLIGHT*

On October 20, 2009, Capt Vicki Davis, Aerospace Education Officer for the senior members kicked off AEPSM training with the first two chapters of the book, *Aerospace: The Journey of Flight*.

The "*Journey of Flight*" is the senior member's study and reference material for successfully passing the test for the Chuck Yeager Award.



Capt Davis presented and lead discussions on the Introduction to Air Power and the Adolescence of Air Power from 1904 to 1919 (through the beginning technology of WWI.) She followed up with chapter quizzes on the material presented.

After the Tuesday's meeting concluded, several members, including Capt Bill Bickford, and SM John Pittman commented how interesting and well presented the class had been.

Capt Davis will be presenting more Aerospace Education classes on the book to not only meet the Aerospace Education mission, but to make the information relevant to modern age pioneering and technology. Aerospace Education is evolving and new history is being made each day.

The next **Aerospace Education** class, **November 17, 2009**, will involve a hands-on activity, so **be sure to attend.** ❖

## CADET AEROSPACE EDUCATION: GUEST SPEAKER – MAJOR RYAN AERNI (USAF)

On November 10, 2009, Air Force Major Ryan Aerni, a student at the U.S. Army Command & General Staff School located at Fort Leavenworth, Kansas, spoke to squadron cadets about the mission of the Air Force, his flying experiences, and decisions he made to join the United States Air Force as an officer by graduating from the United States Air Force Academy in 1997. Major Aerni is an Air Force Senior Pilot with more than 4,400 hours flying the T-37, T-1, KC-10, and the C-5. He has participated in air operations in both peacetime and during armed conflict in Southwest Asia.



Major Aerni not only presented the Air Force Mission, Creed, and the current leadership, he tested the cadet's knowledge of the Air Force in general including aircraft types, capabilities, features, and new unmanned aircraft and the need for ground based pilots to fly the unmanned aircraft. He rewarded cadets with Air Force unit fighter and cargo patches if they correctly answered questions.

The cadets definitely enjoyed hearing Major Aerni speak of his experiences of being an Air Force officer and pilot. Several cadets took a special interest in his Academy education and expressed an interest in finding out more information from the Aerospace Education Officer on how to become a well qualified applicant.

Major Aerni's presentation had an extra benefit for the Squadron because he served as a great recruiter. Visitors to the meeting were impressed by his candor and ability to relate to the cadets resulting in a visitor requesting an application to join CAP and the squadron. ❖

## SENIOR MEMBERS: AEROSPACE EDUCATION EXCELLENCE (AEX) PROGRAM – 2010 PARTICIPATION

In 2010, the Squadron's senior members will receive hands-on aerospace activity workbooks to participate in six activities plus one aerospace education day as part of the AEX Unit Program. The program is "fun and reinforces many of the important laws, principles and ideas associated with aerospace." (CAPP 15) The activities will be completed during six of the regularly scheduled Aerospace Education training on the second Tuesday of every month.

The one aerospace education activity will involve a trip to an airspace visitor's center, observatory or other aircraft related facilities.

Everybody who participates in the required activities will be awarded with a completion certificate and the Squadron will receive a plaque for display. Let's have fun in 2010 with aerospace education. ❖

## ARES I-X LIFT-OFF

(NASA) On October 28, 2009, after shrugging off some delays due to clouds, Ares I-X lifted off into the Florida sky and accomplished what it was designed to do: lift off, test the flight software, perform a separation maneuver, and test the recovery system. This was a great day for the Ares I-X Mission Management Office, and a first step toward NASA's next generation of human spaceflight. More details on the data will be coming out over the next several days, weeks, and months.

The skies looked clear except for some high clouds, no rain in the immediate forecast, so why might a rocket not launch as originally scheduled? The answer is something called **triboelectrification**. While this isn't a word you encounter every day, you might experience it if you walk across a dry carpet or brush up against a cat and then touch a metal



surface: it's static.

In the case of Ares I-X, flying through high-level clouds could have generated "P-static" (P for precipitation), which would have created a corona of static around the rocket causing interference with radio signals sent by or to the rocket. This would have created problems when the rocket tried to transmit data down to the ground or if the Range Safety Officer at Cape Canaveral Air Force Station needed to send a signal to the flight termination system. Until the 45th Space Wing and observer aircraft indicate that the skies were clear, Ares I-X waited them out. ❖



## SQUADRON CADET GROUP PHOTO WITH MAJOR RYAN AERNI



New Century Composite Squadron Cadets with Air Force Major Ryan Aerni

## YOUR AEROSPACE EDUCATION TEAM & CONTACTS



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